REMARKS

Reconsideration and allowance of this application are respectfully requested in view of the foregoing amendments and the following explanations and remarks.

In paragraph 2 of the Office Action, claims 1-21 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The Examiner pointed out that the limitation in claim 1, lines 11-12; claim 4, lines 5-6; claim 20, lines 18-19 and claim 21, lines 10-11, that the phrase "upper chain stay members control rear wheel motion predominantly in only a vertical direction" was vague, because it was unclear how something can be controlled "predominantly in only" a certain direction.

Claims 1, 2, 4, 7, 20 and 21 have been amended to delete the word "only" from the phrase. Additionally, the specification has been amended to delete the word "only" from the phrase.

Therefore, it is respectfully submitted that clams 1-21, as now amended, are sufficient to overcome the rejection under 35 U.S.C. 112, second paragraph.

Applicant's agent wishes to first discuss the provisionally allowable subject matter and then the rejection of the claims under 35 U.S.C. 102(b) based on the Lester reference.

On page 3, paragraph 5, of the Office Action, claims 2-19 were deemed to be allowable if amended to overcome the rejection under 35 U.S.C. 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims.

On page 3, paragraph 6, of the Office Action, claim 20 was deemed to be allowable if amended to overcome the rejection under 35 U.S.C. 112, second paragraph.

Base claim 1 has been amended to include the subject matter of provisionally allowable claim 3. Amended base claim 1 now includes the limitations that the upper chain stay members are secured to the seat tube a distance above the bottom bracket shell at a point to stiffen the frame laterally, transfer rear wheel loads to the seat tube, control rear wheel motion predominantly in a vertical direction, place the seat tube in bending at or near the bottom bracket shell, and allow elastic deflection of the seat tube.

Amended base claim 1 is now essentially the same as provisionally allowable claim 3 written in independent form and includes the subject matter deemed to be allowable, which should now make claim 1 an allowable base claim.

Provisionally allowable claim 2 has been rewritten in independent form and to include all of the limitations of original base claim 1, but with the limitation that the upper chain stay members are secured to both the seat tube and the down tube a predetermined distance adjacent to the bottom bracket shell. It is submitted that the limitation that the upper chain stay members "converge" from the seat tube is found in provisionally allowable claim 4 and is not necessary to distinguish claim 2 over the prior art, as discussed below.

Amended base claim 2 is now essentially the same as provisionally allowable claim 2 written in independent form and includes the subject matter deemed to be allowable, which should now make claim 2 an allowable base claim.

Provisionally allowable claims 4-19 have been amended to depend directly or indirectly from amended base claim 2 and thus, now depend from an allowable base claim, and should be allowable along with amended claim 2.

Provisionally allowable base claim 20 has been amended to overcome the rejection under 35 U.S.C. 112, second paragraph, which should now make it an allowable base claim, as indicated by the Examiner on page 3, paragraph 6, of the Office Action.

On page 2, paragraph 4, of the Office Action, claim 1 and 21 were rejected under 35 U.S.C. 102(b) as being anticipated by Lester.

As discussed above, base claim 1 now contains the subject matter of provisionally allowable claim 3, and further discussion of the rejection of the claim 1 under 35 U.S.C. 102(b) based on the cited Lester reference is believed to be moot since the claim now contains subject matter deemed to be allowable and is believed to be allowable for the reasons set forth above.

Moreover with regard to claim 1, Lester teaches away from the desirability of securing a pair of laterally opposed upper chain stay members to the seat tube at a distance above the bottom bracket shell at a point to place the seat tube and the down tube in bending intermediate their lengths. Instead, Lester clearly teaches at column 2, lines 10-14, and shows in Fig. 3, that the extra long stays are "re routed clear of the seat tube to diagonally converge with the upper slope of the down tube at 2.5 inches past center or at sixty percent" (i.e., slightly above the center of the down tube).

With regard to claim 21, Lester teaches away from the desirability of securing a single pair of laterally opposed rigid chain stay members at their forward ends to the bottom bracket shell, wherein the stays transfer rear wheel loads to the bottom bracket shell to cause slight rotation thereof about a horizontal axis to place said seat tube and said down tube in highest bending at their juncture with the bottom bracket shell and allow an amount of elastic deflection of the seat tube and the down tube. Instead, Lester clearly teaches at column 2, lines 10-13, that the extra long stays are "re routed clear of the seat tube"; and at column 2, lines 39-41, that

"...triangulating the down tube with extended stays buttresses the down tube..."; and at column 2, line 50, that "...major rebound forces bypass the seat tube..."

Therefore, it is respectfully submitted that amended claims 1 and 21 are now clearly distinguished over the Lester reference and are not anticipated or obvious based on the teachings contained in the reference and should be allowed along with claims 2-20.

In accordance with 37 CFR 1.56, this amendment is accompanied by a supplemental information disclosure statement form PTO/SB/08A which contains a list of patents that were listed in an international search report, which was conducted after this application was filed in Applicant's counterpart PCT Application No. PCT/US03/31176.

Applicant's agent has carefully examined the references that were noted in the international search report, and submits that those references do not teach the combination of elements working together as a whole as set forth in the claims now in this case.

Holloway, U.S. Patent 3,030,124 discloses a bicycle frame having prefabricated joints and sleeves utilizing thermosetting resin to rigidly bond the sleeves and frame members together. Holloway shows a bike frame with arch-like curved seat stays that run from the rear wheel axle to the top of the seat tube and on to the down tube. However, these stays are not suggested to function in a manner to create any rear wheel suspension action. The arch-like stays are attached directly to the top of the seat tube, hence making the frame function much like a very heavy version of a conventional double-triangle frame incorporating curved seat stays (although in this case they arch up rather than arch down as in modern bikes). There is no suggestion that the seat tube is placed in bending to function as a spring and integral part of the suspension.

Campagnolo, U.S. Patent 4,437,679 discloses a light and strong tube structure for frames of bicycles and motorcycles having cross sections with a variable thickness of the tube wall. The tube wall is formed by two or more layers of different materials, of which at least one is metallic material and at least another one has a preferential direction of tensile strength. Preferably, the straight cross sections of the tube are outwardly defined by a circle and inwardly defined by an ellipse and the said layers comprise an external metallic layer and an internal layer of fibers incorporated into resin.

Ford, U.S. Patent 4,838,569 discloses a generally elliptical resilient bicycle frame formed as a single continuous member from a wound fiber and plastic composite acting as a spring flexing to absorb varying road and riding conditions. The frame has forward and rearward ends laterally bifurcated from a point intermediate its ends to the rearward end so as to define upper and lower longitudinally extending portions each bifurcated from the intermediate point rearward. A steering pivot is located at the forward end of the frame for mounting a front wheel fork assembly and handle bar; and a modular seat post-pedal assembly is mounted to the laterally bifurcated portion of the frame adjacent the intermediate point and extends between and above and below the upper and lower longitudinally extending frame portions.

Willatt, U.S. Patent 616,383 discloses a bicycle frame wherein all of the frame members, including the down tube are formed by laterally spaced tubes arranged in pairs upon each side of the central vertical plane of the frame.

The remarks set forth above regarding the Lester reference are equally applicable to the newly presented references. None of these references either alone or in combination show or suggest the combination of structural elements working together as a whole, as recited in the claims now in this case, and that the claims are clearly distinguished over the references.

There are now four independent claims in this case, and a check for the requisite government fee for one claim in excess of three is submitted herewith.

Accordingly, in view of the foregoing amendments, explanations and remarks it is respectfully requested that the claims 1, 2, and 4 through 21 be reconsidered and allowed, and that this application be passed to issue.

Respectfully submitted,

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